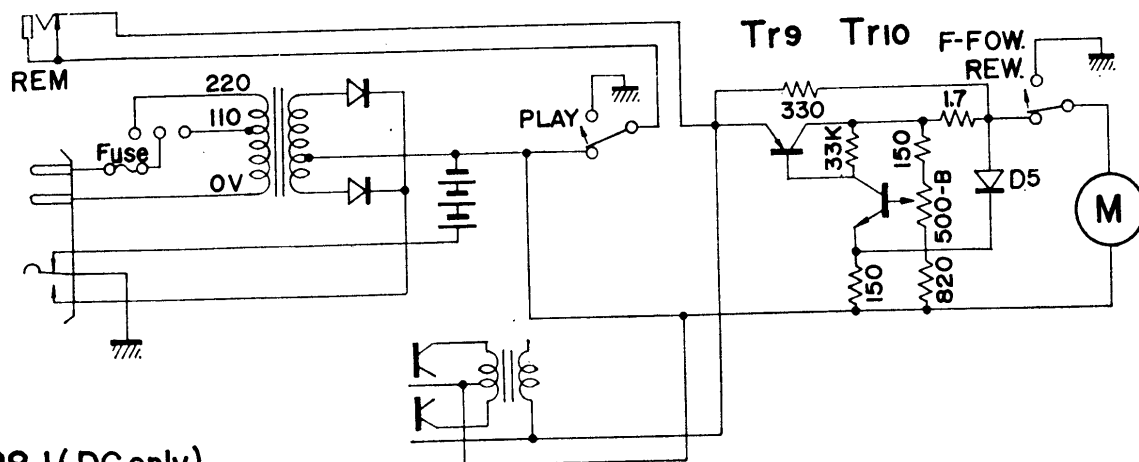
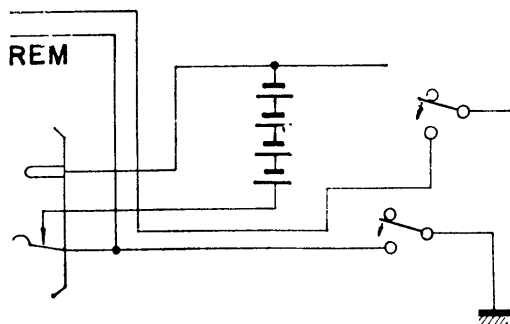


General Description: Eight transistor plus four diodes cassette loading dual-track tape recorder. Power supplies: 4×1.5 V batteries or A.C. mains. Audio frequency output 1 W.

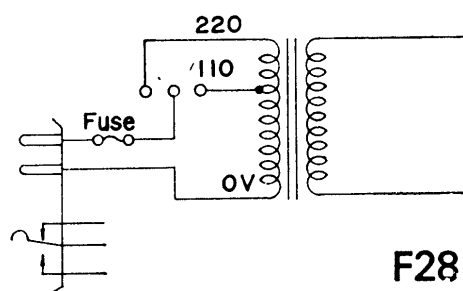
TP-728HB



TP-728J (DC only)



TP-728H



(F28) CIRCUIT MODIFICATIONS—TP728 SERIES

Capacitors:		Quantity					Remarks
Part No.	Description		H	J	HB	C	
8332220	Electrolytic capacitor	1	1	1	1	1	200 μ F 6 WV
8331120	Electrolytic capacitor	1	1	1	1	1	100 μ F 3 WV
8331510	Electrolytic capacitor	3	3	3	3	3	50 μ F 3 WV
8332310	Electrolytic capacitor	1	1	0	0	1	30 μ F 6 WV
8331110	Electrolytic capacitor	4	4	4	4	4	10 μ F 3 WV
8332100	Electrolytic capacitor	1	1	1	1	1	1 μ F 6 WV
8332520	Electrolytic capacitor	1	1	0	0	1	500 μ F 10 WV
7015033	Arox capacitor	1	1	1	1	1	0.5 μ F 6 WV
7015048	Arox capacitor	2	2	2	2	2	1 μ F 6 WV
8727840	Mylar capacitor	1	1	1	1	1	0.03 μ F
8727720	Mylar capacitor	1	1	1	1	1	0.005 μ F
8727800	Mylar capacitor	1	1	1	1	1	0.02 μ F
8727810	Mylar capacitor	3	3	3	3	3	0.01 μ F
8517580	Styrol capacitor	1	1	1	1	1	820 pF
8212470	Ceramic capacitor	1	1	1	1	1	200 pF
8132159	Electrolytic capacitor	1	1	1	1	1	500 μ F 10 WV
8142829	Electrolytic capacitor	2	2	2	2	2	500 μ F 6 WV
8122103	Electrolytic capacitor	2	2	2	2	2	200 μ F 10 WV

Resistors:

Part No.	Description	Quantity					Remarks
			H	J	HB	C	
8132124	Fixed resistor	1	1	1	1	1	120k Ω
8132223	Fixed resistor	2	2	2	2	2	22k Ω
8132153	Fixed resistor	1	1	1	1	1	15k Ω
8132123	Fixed resistor	2	2	2	2	2	12k Ω
8132103	Fixed resistor	1	1	1	1	1	10k Ω
8132682	Fixed resistor	2	2	2	2	2	6.8k Ω
8132562	Fixed resistor	1	1	1	1	1	5.6k Ω
8132332	Fixed resistor	1	1	1	1	1	3.3k Ω
8132272	Fixed resistor	1	1	1	1	1	2.7k Ω
8132202	Fixed resistor	1	1	1	1	1	2k Ω
8132152	Fixed resistor	2	2	2	2	2	1.5k Ω
2258618	Fixed resistor	1	1	1	1	1	1k Ω
2258619	Fixed resistor	1	1	1	1	1	820 Ω
7035028	Fixed resistor	1	1	1	1	1	680 Ω
7064025	Fixed resistor	2	2	2	2	2	560 Ω
7031080	Fixed resistor	1	1	1	1	1	470 Ω
7064015	Fixed resistor	1	1	1	1	1	380 Ω
7032003	Fixed resistor	1	1	1	1	1	330 Ω
8132102	Fixed resistor	1	1	1	1	1	270 Ω
8132821	Fixed resistor	1	1	1	1	1	150 Ω
8132681	Fixed resistor	2	2	2	2	2	100 Ω
8132561	Fixed resistor	3	3	2	2	3	10 Ω
8132471	Fixed resistor	1	1	1	1	1	1.5 Ω
8132391	Fixed resistor	1	1	2	2	1	82 Ω
8132331	Fixed resistor	1	1	1	1	1	10 Ω
8132271	Fixed resistor	1	1	1	1	1	220 Ω
8132151	Fixed resistor	2	2	2	2	2	4.7k Ω
8132101	Fixed resistor	1	1	1	1	1	1.8k Ω
8132100	Fixed resistor	1	1	1	1	1	39 Ω

List of Transistors, Diodes and Thermistor:

Part No.	Description	Quantity					Remarks
			H	J	HB	C	
8024390	Transistor	1	1	1	1	1	2 SB 439
8020540	Transistor	1	1	1	1	1	2 SB 54
8020560	Transistor	3	3	3	3	3	2 SB 56
8031825	Transistor	1	1	1	1	1	2 SC 182 (5)
8022631	Transistor	2	2	2	2	2	2 SB 263 (1)
8052446	Diode	2	2	2	2	2	1 S 446
7027039	Diode	2	2	0	2	2	10 D-1
7026008	Thermistor	1	1	1	1	1	KD-13



(F29) PRINTED CIRCUIT LAYOUT—TP728 SERIES